

MILL CREEK 2 AND 3 HYDROELECTRIC SYSTEMS,
MILL CREEK 2 INTAKE
Mill Creek
Yucaipa vicinity
San Bernardino County
California

HAER No. CA-2272-B

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

FIELD RECORDS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of Interior
1111 Jackson Street
Oakland, California 94607

HISTORIC AMERICAN ENGINEERING RECORD

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Location: The Mill Creek 2 Intake (MC 2 Intake) is located southwest of the Mill Creek 2 Mountain Home Intake and southeast of the Mill Creek 2 Sandbox. It is located along Mill Creek opposite Mountain Home Village in San Bernardino County, California. (USGS topographic map Yucaipa, Section 8; T. 1S., R. 1W.).

Significance: The MC 2 Intake is one of the key components of the Mill Creek 2 Hydroelectric System (MC 2). It is one of the earliest examples of a high-head hydroelectric system within the United States and one of the first commercial three-phase alternating current stations in California. Three-phase alternating later became the industry standard.

Description: Located just opposite the Mountain Home Village, on the south side of Mill Creek, is the Mill Creek 2 Intake (this is the primary intake for Mill Creek 2 Hydroelectric System). It is a poured concrete structure built into the south side of the hill utilized to collect water diverted from Mill Creek. On the east side of the MC 2 Intake is the former water level monitoring equipment room. It is accessible via a door opening that faces onto a concrete slab, (no door is present). On the west side of the MC 2 Intake is the headgate; currently, only the top section is exposed above ground. The diversion dam is also likely intact, but is currently buried. The water control box is located to the west. It consists of a rectangular poured concrete structure covered with wood planks. The water control box allows operators to use weir boards to set the intake water level. A rock drop is located directly adjacent to the water control box. It consists of a rubble stone structure with a round floor plan and wood planks covering the top opening. Rocks, gravel and water pass through this structure, the rocks and gravel are collected and the water continues into another large rectangular structure surrounded by a chain link fence. A leaf rake and a fish wheel are located within this structure. The wheel tines on the outer diameter of the leaf rake move through slots in a grate, and remove leaves and debris. The fish wheel is covered with a mesh screen that fits tightly to the walls and floor preventing fish from entering the system.

History: The MC 2 Intake was constructed as part of the Mill Creek 2 Hydroelectric System. The MC 2 system was constructed between 1889-1899 by the Redlands Electric Light and Power Company and later absorbed by Edison Electric Company of Los Angeles in 1901. MC 2 has not been in operation since 1992 when it was damaged in a flood. Today MC 2 is owned by Southern California Edison. Please see the Historic Context section in the general Historic American Engineering Record for the Mill Creek 2 and 3 Hydroelectric Systems (HAER No. CA-2272) for additional information.

Sources:

Darrell W. Heinrich, Project Manager, Eastern Hydro Division, Southern California Edison, telephone interview by Christeen Taniguchi, November 18, 2008.

Fowler, Frederick Hall. *Hydroelectric Power Systems of California and*

Their Extensions into Oregon and Nevada, Water-Supply Paper 493. Washington, D.C.: Government Printing Office, 1923.

Low, George P. "The Generating, Transmission and Distribution Systems of The Edison Electric Company of Los Angeles, Cal.," *The Journal of Electricity, Power and Gas*. vol. XIII, no. 1. January, 1903.

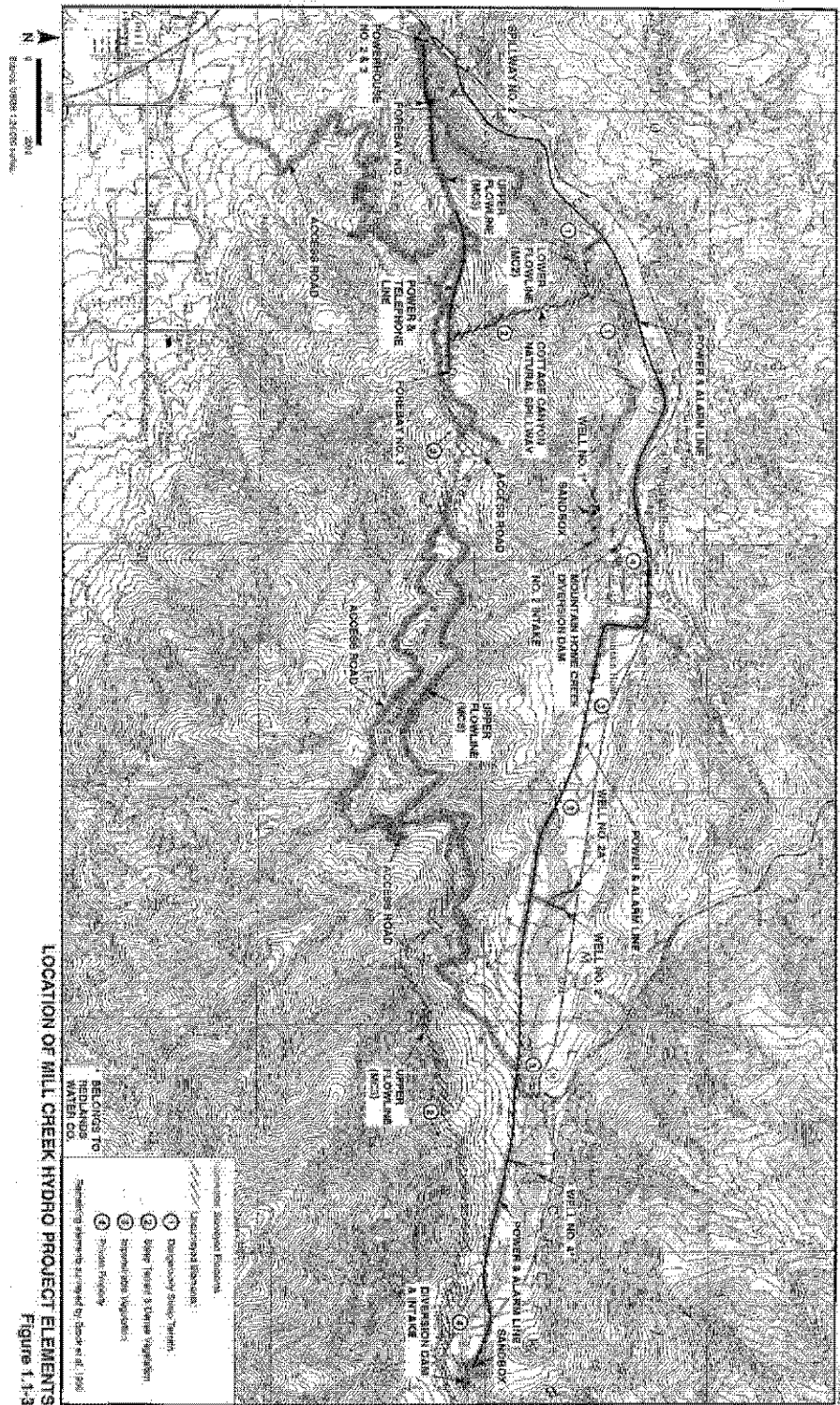
"Means Much to Redlands: Big Light and Power Deal Closed," *Los Angeles Times*. May 25, 1901, 8.

White, David R. M. "Cultural Resource Management Plan for the Southern California Edison Company Mill Creek Hydroelectric Project (FERC Project No. 1934) San Bernardino County, California," June 1993.

Historian: Christeen Taniguchi, Senior Architectural Historian, and Nicole Collum, Architectural Historian II, Galvin Preservation Associates, 1611 S. Pacific Coast Highway, #104, Redondo Beach, CA 90277, 2008-2009.

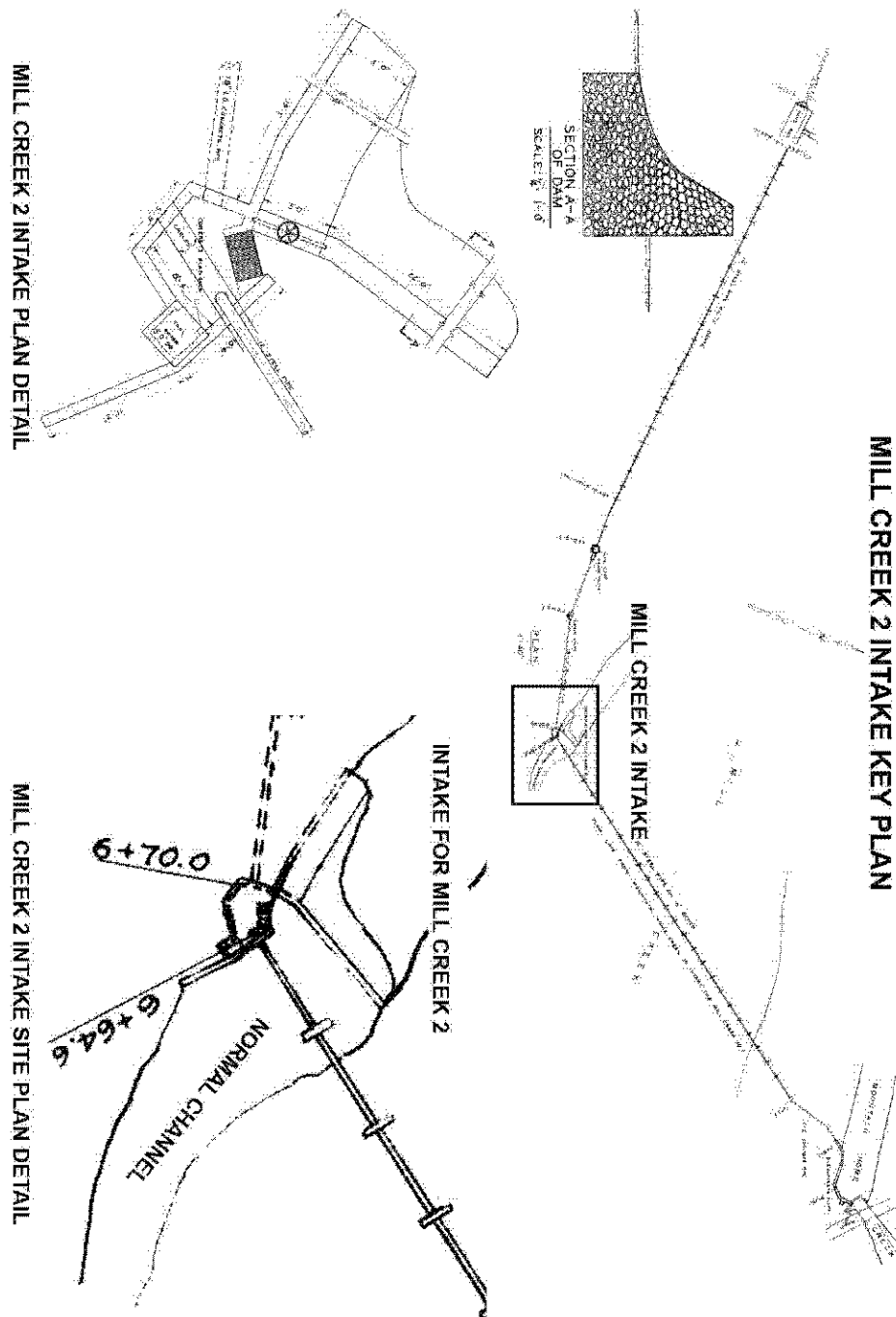
Project Information: MC 2 has not operated since 1992 when it was damaged during floods. It was not, however, decommissioned. The Southern California Edison Company, in conjunction with the San Bernardino National Forest, the agency that owns the property, proposes to formally decommission the facility. This process will include filling the sandbox and forebay with slurry, and removing the metal features. Although MC 3 is still in operation, it is also being recorded as part of this project because of the system's close association with MC 2.

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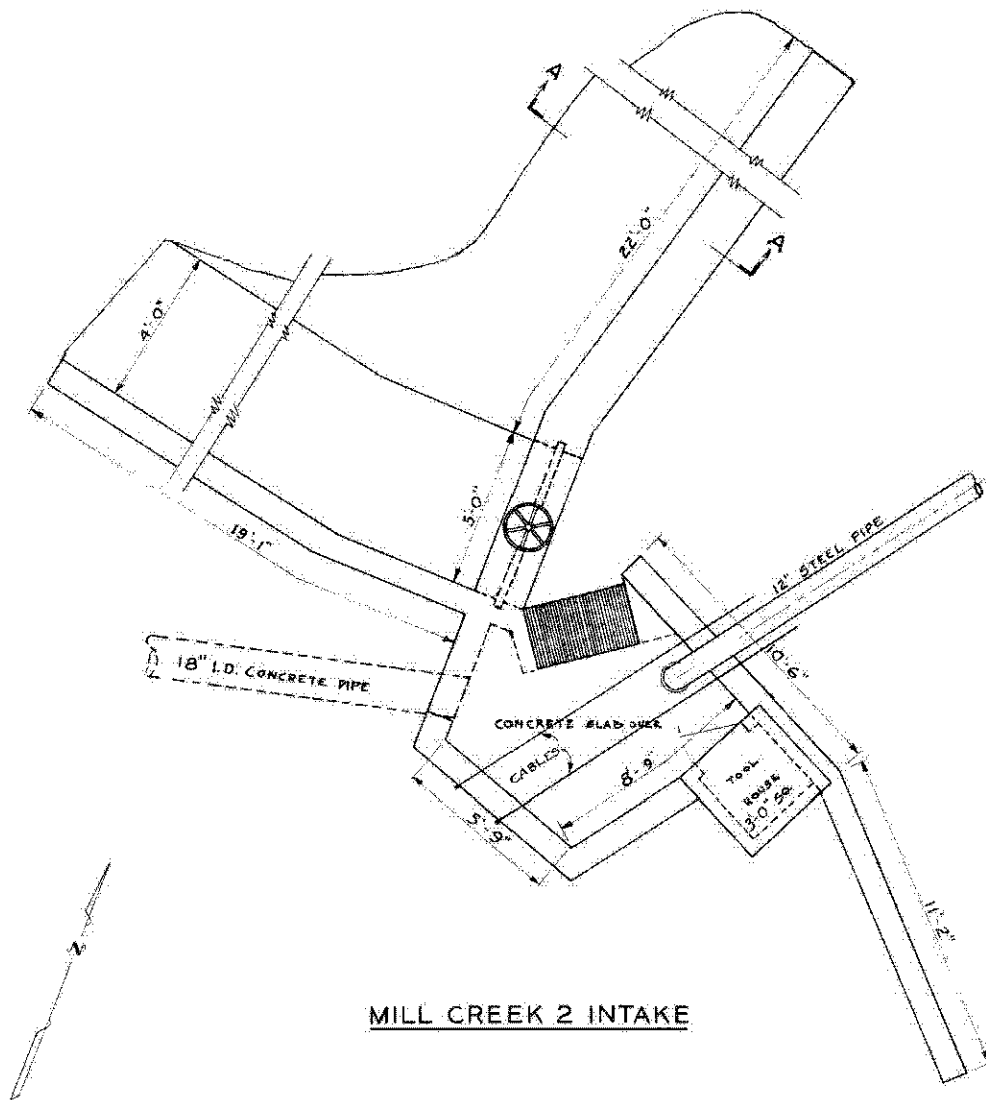
Location of Mill Creek Hydro Project Elements. (Map Courtesy of Southern California Edison)

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Mill Creek 2 Site Plan and Detail Drawings. (Plan and Drawings Courtesy of Southern California Edison)

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Detail taken from previous plan (Courtesy of Southern California Edison).